

In the Claims

1. (Currently Amended) A high tensile strength hot-rolled steel sheet having superior strain aging hardenability comprising: in percent by mass,

0.15% or less of C;

2.0% or less of Si;

3.0% or less of Mn;

0.08% or less of P;

0.02% or less of S;

less than 0.02% of Al;

0.0050% to 0.0250% of N; and

the balance being Fe and incidental impurities,

the ratio N (mass%)/Al (mass%) being 0.30.6 or more,

N in the dissolved state being 0.00100.0030% or more, wherein the hot-rolled steel sheet has a ferrite phase with an average grain size of $10\mu\text{m}$ or less.

2. (Currently Amended) A high tensile strength hot-rolled steel sheet having superior strain aging hardenability with a tensile strength of 440 MPa or more comprising: in percent by mass,

0.15% or less of C;

2.0% or less of Si;

3.0% or less of Mn;

0.08% or less of P;

0.02% or less of S;

less than 0.02% of Al;

0.0050% to 0.0250% of N; and

the balance being Fe and incidental impurities,

the ratio N (mass%)/Al (mass%) being 0.30.6 or more, N in the dissolved state being 0.00100.0030% or more,

wherein the hot-rolled steel sheet has a structure in which the areal rate of the ferrite phase having an average grain size of $10 \mu\text{m}$ or less is 50% or more.

3. (Original) A steel sheet according to Claim 2 further comprising at least one selected from the group consisting of the following Group a to Group d:

Group a: 1.0% or less in total of at least one of Cu, Ni, Cr, and Mo

Group b: 0.1% or less in total of at least one of Nb, Ti, and V

Group c: 0.0030% or less of B

Group d: 0.0010% to 0.010% in total of at least one of Ca and REM.

4. (Original) A steel sheet according to either Claim 2 or 3, wherein the high tensile strength hot-rolled sheet has a thickness of 4.0 mm or less.

5. (Previously Presented) A high tensile strength hot-rolled plated steel sheet produced by electroplating or hot-dip plating a steel sheet according to Claim 2.

Claims 6 - 9 (Cancelled)

10. (Currently Amended) A high tensile strength hot-rolled steel sheet having superior strain aging hardenability with a BH of 80 MPa or more, a ΔTS of 40 MPa or more, and a tensile strength of 440 MPa or more comprising, in percent by mass,

0.15% or less of C;

2.0% or less of Si;

3.0% or less of Mn;

0.08% or less of P;

0.02% or less of S;

less than 0.02% of Al;

0.0050% to 0.0250% of N; and

the balance being Fe and incidental impurities,

the ratio N (mass%)/Al (mass%) being 0.30.6 or more, N in the dissolved state being 0.00100.0030% or more,

wherein the hot-rolled steel sheet has a structure in which the areal rate of the ferrite phase having an average grain size of 10 μm or less is 70% or more, and the areal rate of the martensite phase is 5% or more.

11. (Cancelled)

12. (Currently Amended) A high tensile strength hot-rolled steel sheet having superior strain aging hardenability comprising: in percent by mass,

0.03% to 0.1% of C;

2.0% or less of Si;

1.0% to 3.0% of Mn;

0.08% or less of P;

0.02% or less of S;

less than 0.02% of Al;

0.0050% to 0.0250% of N;

0.1% or less in total of at least one of more than 0.02% to 0.1% of Nb and more than 0.02% to 0.1% of V; and

the balance being Fe and incidental impurities,

the ratio N (mass%)/Al (mass%) being 0.30.6 or more,

N in the dissolved state being 0.00100.0030% or more,

the total of precipitated Nb and precipitated V being 0.015% or more,

wherein the hot-rolled steel sheet has a structure in which the areal rate of the ferrite phase having an average grain size of $10 \mu\text{m}$ or less is 80% or more, and the average grain size of a precipitate comprising a Nb carbonitride or a V carbonitride is $0.05 \mu\text{m}$ or less.

13. (Cancelled)

14. (Previously Presented) A high tensile strength hot-rolled plated steel sheet produced by electroplating or hot-dip plating a steel sheet according to Claim 3.

15. (Previously Presented) A high tensile strength hot-rolled plated steel sheet produced by electroplating or hot-dip plating a steel sheet according to Claim 4.